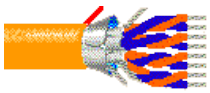
Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

S1333NH Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable



For more Information please call

1-800-Belden1

General Description:

18 AWG stranded (7x26) tinned copper conductors, polyolefin insulation, individual and overall Beldfoil® shields (100% coverage), tinned copper drain wire, LSZH jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
24	18	7x26	TC - Tinned Copper

Total Number of Conductors: 48

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG	Stranding	Conductor Material
20	7x28	TC - Tinned Copper

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100.000

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
18	7x26	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Haloarrest®	FRPE - Flame Retardant Polyethylene

Outer Jacket Ripcord: Yes

Overall Cable

Overall Nominal Diameter: 1.130 in.

Pair

Pair Color Code Chart:

Number	Color
1	Blue and Orange and Numbered 1
2	Blue and Orange and Numbered 2
3	Blue and Orange and Numbered 3
4	Blue and Orange and Numbered 4
5	Blue and Orange and Numbered 5
6	Blue and Orange and Numbered 6
7	Blue and Orange and Numbered 7
8	Blue and Orange and Numbered 8
9	Blue and Orange and Numbered 9
10	Blue and Orange and Numbered 10
11	Blue and Orange and Numbered 11
12	Blue and Orange and Numbered 12
13	Blue and Orange and Numbered 13
14	Blue and Orange and Numbered 14
15	Blue and Orange and Numbered 15

16	Blue and Orange and Numbered 16
17	Blue and Orange and Numbered 17
18	Blue and Orange and Numbered 18
19	Blue and Orange and Numbered 19
20	Blue and Orange and Numbered 20
21	Blue and Orange and Numbered 21
22	Blue and Orange and Numbered 22
23	Blue and Orange and Numbered 23
24	Blue and Orange and Numbered 24

Pair Lay Length & Direction:

Lay Length (in.)	Twists (twist/ft)
2.000	6.000

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +90°C
UL Temperature Rating:	90°C
Max. Recommended Pulling Tension:	1377 lbs.
Min. Bend Radius/Minor Axis:	11.300 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, ITC, PLTC
CEC/C(UL) Specification:	CM
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	11/07/2007
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	UL1685 Vertical Tray Flame Test
IEC Flame Test:	60332-3-24 (Category C)

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes
Oil Resistance:	No

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Unaveraged Impedance:

Freq. (MHz)	Impedance (Ohm)
0.031	100.000

Nom. Inductance:

Inductance (µH/ft)
0.190

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
45.000

Nom. Mutual Capacitance:

Capacitance (pF/ft)
24.000

Maximum Capacitance Unbalance:

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Capacitance (pF/ft)
1.200

Nominal Velocity of Propagation:

VP (%)
66.000

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
5.860

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.900

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 7.500 Ohm/1000 ft

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
0.039	0.080

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
0.039	0.091

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Description	Current
Per Conductor	5.2 Amps

Other Electrical Characteristic 1: Max. Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft

Other Electrical Characteristic 2: 31.25 KBits/sec

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

Revision Number: 0 Revision Date: 04-06-2011